

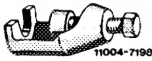
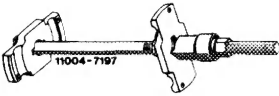
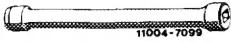
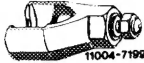

33–512 Removal, disassembly, assembly and installation of lower control arm

Tightening torques		Nm
Hex nut of supporting joint		80
Eccentric bolt of lower control arm bearing		180
Hex nut of track rod ball joint		35
Twelve-point screws of lower shock absorber suspension		20
Hex bolts for attaching brake support to frame floor		35
Hex bolts for attaching spring disc to lower control arm		20
Fitted hex bolt for attaching brake support to lower control arm	M 10 ¹⁾	70
	M 12 x 1,5 ²⁾	105
Hex bolt for attaching clamp to supporting pipe		20

1) 1st version (up to December 1976). For repairs, use screws M 12 x 1.5 only.

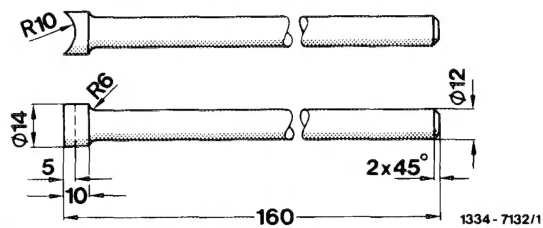
2) 2nd version (starting January 1977).

Special tools

Puller for ball joint of track rod		186 589 10 33 00
Spring tensioner for front spring		116 589 06 31 00
Pipe socket wrench insert 24 mm 1/2" square for spring tensioner		116 589 01 09 00
Remover for supporting joint		116 589 09 33 00
Wrench for upper shock absorber suspension		107 589 00 09 00

Self-made tools

Adjusting gauge for basic adjustment of caster



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Spacing plate

refer to illustration
item 17

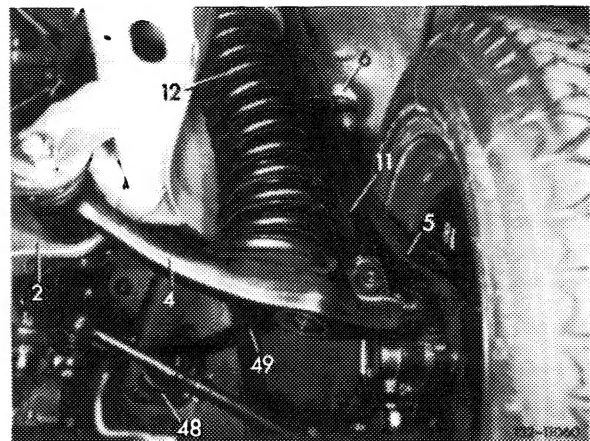
Notes

Tighten eccentric bolt of lower control arm bearing only when vehicle is resting on its wheels ready for driving. If this bearing is tightened without load on wheels, wrong values for control arm position would result.

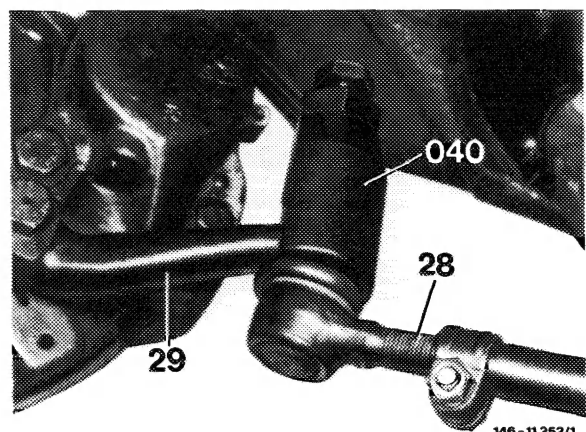
The front shock absorber serves simultaneously as a deflection stop of front wheel. For this reason, release shock absorber suspension only when the vehicle is resting on its wheels or when the lower control arm is supported. With the shock absorber released, the upper control arm rests on end stop at front end. For assembly of upper suspension, either place vehicle on its wheels or lift axle half at lower control arm. Replace self-locking bolts and nuts on principle.

Removal

- 1 Remove front shock absorber (11), while making sure that the upper shock absorber suspension is loosened first (32–100).
- 2 Jack-up vehicle at the front, remove front wheel.
- 3 Remove front spring (12) (32–200).



- 4 Loosen track rod on steering knuckle arm and remove.

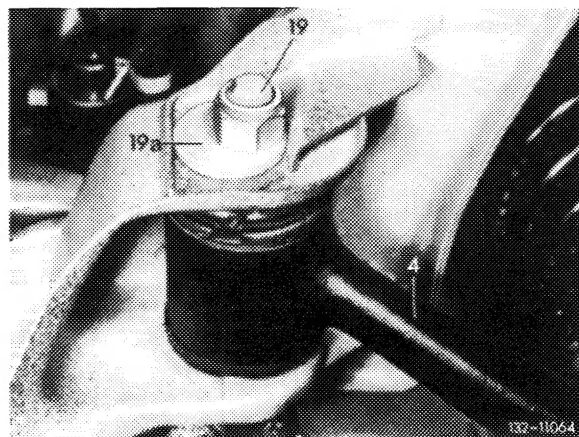


28 Track rod
29 Steering knuckle arm
040 Puller

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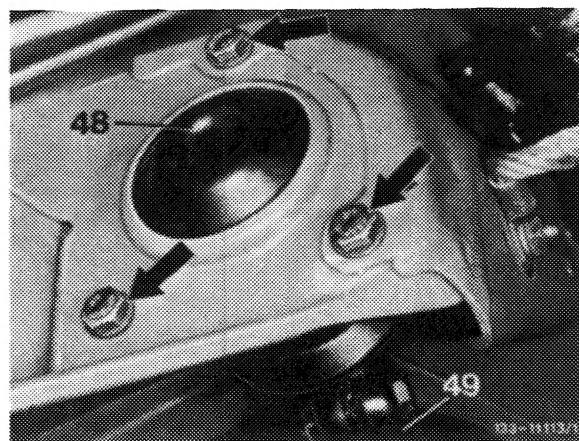
5 Mark position of eccentric bolt for frame cross member on bearing of lower control arm.

- 4 Lower control arm
- 19 Eccentric bolt
- 19a Eccentric disc



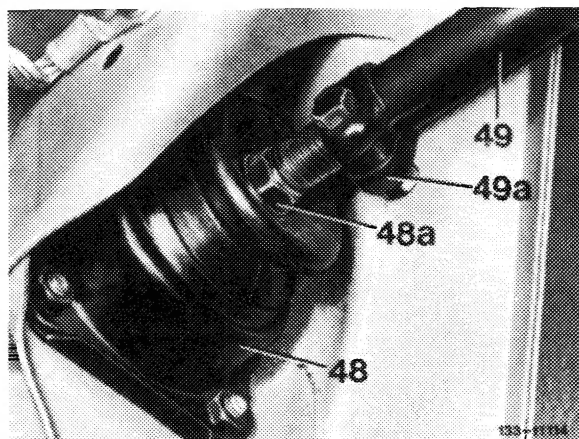
6 Unscrew hex bolts (refer to arrows) for attaching brake support to frame floor.

- 48 Supporting joint
- 49 Supporting tube

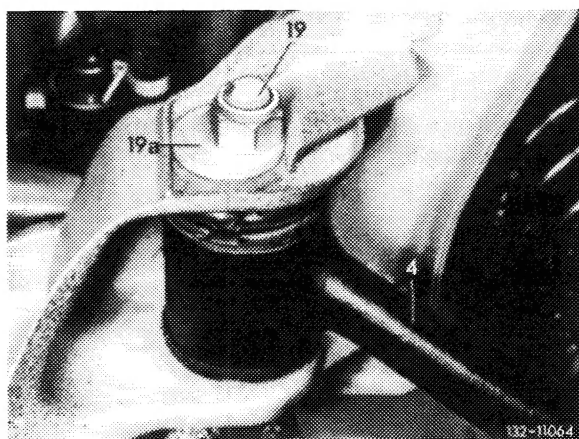


Brake support on frame floor

- 48 Supporting joint
- 48a Ball pin
- 49 Supporting tube
- 49a Clamp



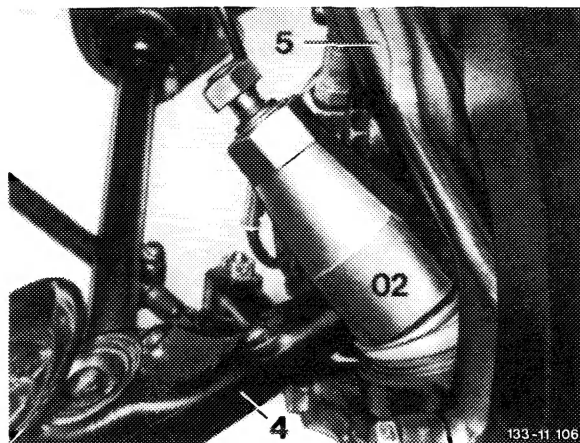
7 Loosen eccentric bolt (19) at bearing of lower control arm and unscrew.



8 Force supporting joint from lower control arm.

9 Remove lower control arm with brake support.

- 4 Lower control arm
- 5 Steering knuckle
- 02 Remover

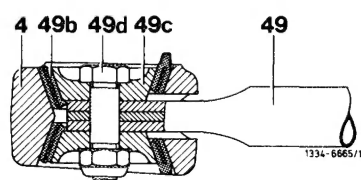


Disassembly

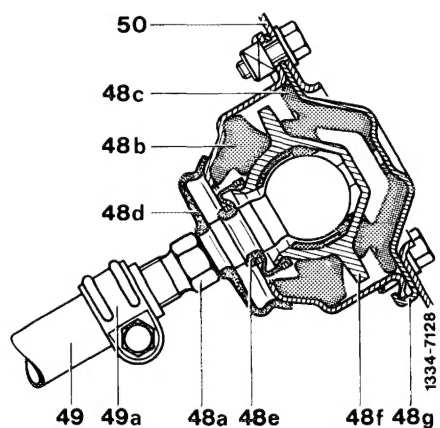
10 Loosen hex bolts for attaching spring disc and remove spring disc.

11 Loosen fitted hex bolt of brake support bearing, remove supporting tube.

- 4 Lower control arm
- 49 Supporting tube
- 49b Rubber bearing
- 49c Disc washer
- 49d Fitted hexagon bolt

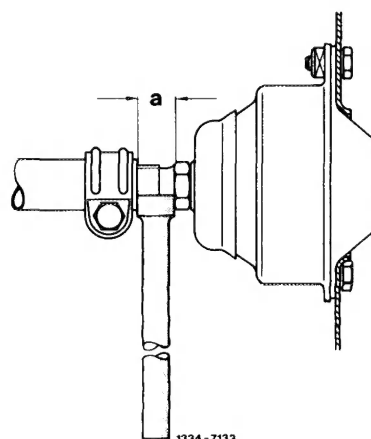


12 Loosen clamp (49a) on supporting tube, unscrew supporting joint by turning ball pin (48a).



Assembly

13 Screw supporting joint into supporting tube, and adjust distance "a" between hexagon head on ball pin and supporting tube for basic adjustment of caster.



"a" = 14 mm

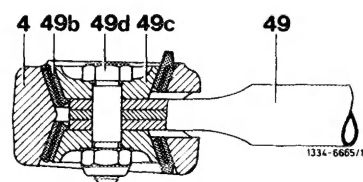
14 Mount supporting tube with new rubber bearings to lower control arm, making sure that the supporting tube rests in cutouts of rubber bearings and that the opening of the clamp is facing downwards.

Note: Prior to installing a new lower control arm, provide arm with paint.

Do not yet tighten fitted hexagon bolt.

15 Attach spring disc with new self-locking hex bolt.

- 4 Lower control arm
- 49 Supporting tube
- 49b Rubber bearing
- 49c Disc washer
- 49d Fitted hexagon bolt



Installation

16 Mount control arm to supporting joint.

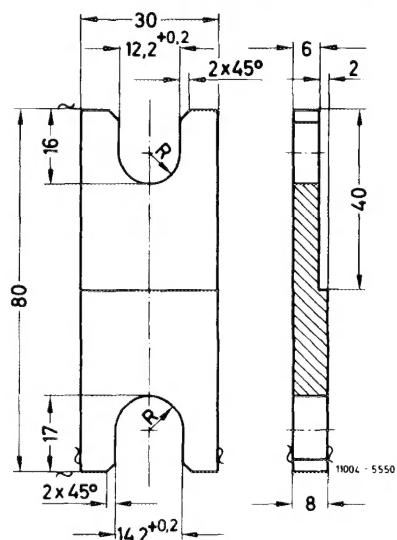
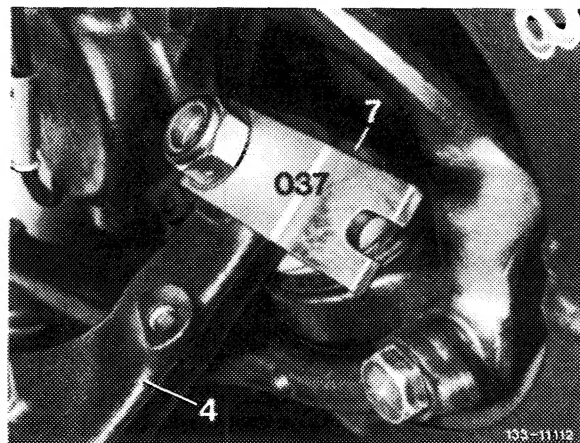
Attention!

Use new self-locking hex nut.

17 If ball pin is turning along on supporting joint when tightening hex nut, insert spacing plate (037) and pull cone of ball pin into control arm when tightening hex nut.

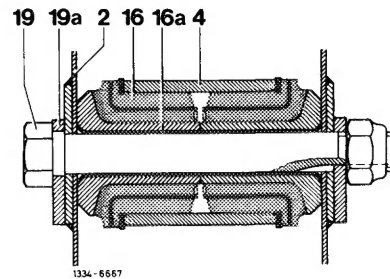
Then tighten hex nut to specified torque.

The spacing plate can be self-made.



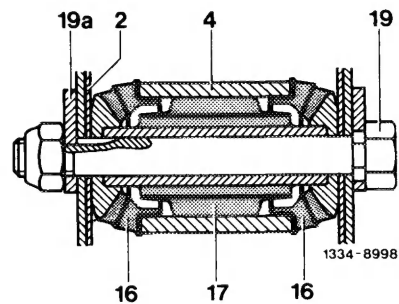
18 Mount bearing of lower control arm to frame cross member.

- 2 Frame cross member
- 4 Lower control arm
- 16 Rubber bearing
- 16a Clamping sleeve
- 19 Eccentric bolt
- 19a Eccentric disc



Note: On vehicles with 15" wheels, 3-part rubber bearings (known from model 126) will be standard starting January 1982 (33-520).

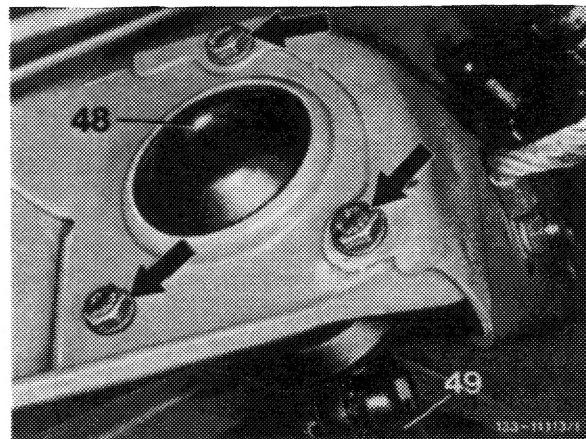
- 2 Frame cross member
- 4 Lower control arm
- 16 Axial-torsion rubber bearing
- 17 Radial-torsion rubber bearing
- 19 Eccentric bolt (camber adjustment)
- 19a Eccentric disc



19 Fasten brake support to frame floor. Tightening torque 35 Nm.

20 Tighten hex. head fitted screw of brake support bearing on lower control arm to specified torque.

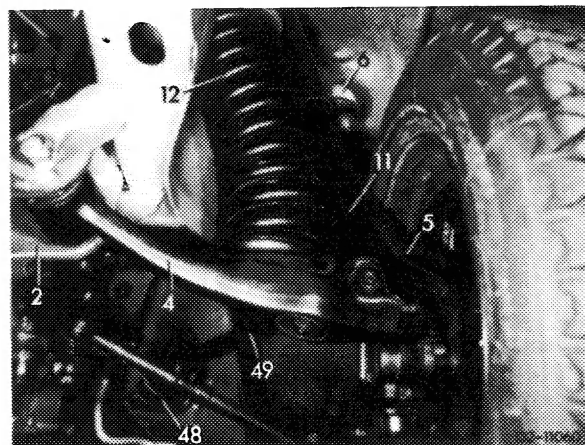
- 48 Supporting joint
- 49 Supporting tube



21 Install front spring (12) (32-200).

22 Mount front shock absorber (11) (32-100).

23 Mount front wheel, lower vehicle.

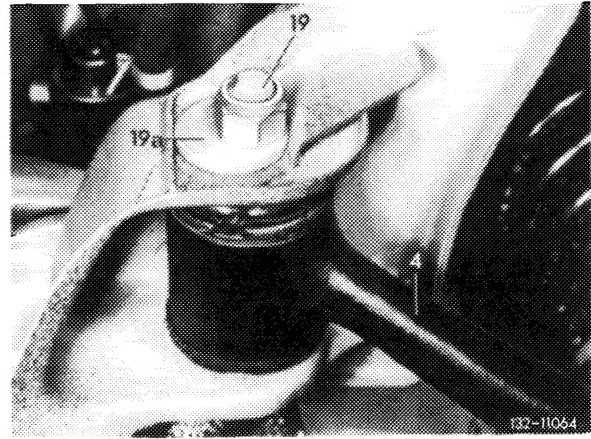


24 Set eccentric bolt of camber adjustment to previously applied mark and tighten.

Attention!

If the position of the eccentric bolt has not been marked during removal, move eccentric bolt into center position for initial adjustment.

- 4 Lower control arm
- 19 Eccentric bolt
- 19a Eccentric disc



25 Mount track rod to steering knuckle arm (46—540).

26 Check vehicle level at front axle (40—300).

27 Check adjustment of front wheels (40—320).

28 Check adjustment of headlights.